



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,414	04/16/2004	Dong-Hoon Lee	0630-1975P	9364
2292	7590	09/19/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			DUDEK, JAMES A	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,414	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> James A. Dudek	<b>Art Unit</b> 2871	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 2,3 and 7-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 2871

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,793,457 (457).

Per claims 1 and 6, 457 teaches a fabrication method for a color filter panel of a display device, comprising: forming a black matrix layer having a first opening on a substrate [opaque layer 3 and first step of methods 1-4]; forming an organic layer on the color filter layer and in the first opening [see column 10, line 41-42]; and forming a spacer by back-exposing the organic layer through the first opening [see column 10, line 49-52, mask “with light-shielding sections...”]. 457 lacks the step of forming a color filter layer on the substrate. However, it was notoriously well known to form color filter between black masks in order to create a color display. Accordingly it would have been obvious to one of ordinary skill at the time of invention to combine the well known color filter with 457.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent US005880803A (803).

Art Unit: 2871

Per claim 1, 803 teaches a fabrication method for a color filter panel of a display device, comprising: forming a black matrix layer having a first opening on a substrate [opaque layer 3a and see columns 4-5]; forming an organic layer on the color filter layer and in the first opening [see column 5, second full paragraph]; and forming a spacer by back-exposing the organic layer through the first opening [see column 5, second full paragraph]. 803 lacks the step of forming a color filter layer on the substrate. However, it was notoriously well known to form color filter between black masks in order to create a color display. Accordingly it would have been obvious to one of ordinary skill at the time of invention to combine the well known color filter with 803.

Per claim 4, 803 teaches the method of claim 1, further comprising: forming an overcoat layer on the color filter layer; and forming an alignment layer on the spacer [see insulation layer 4a and alignment layer 5a].

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 20050099580A1 (580) in view of US Patent US005880803A (803) .

580 teaches teaches a fabrication method for a color filter panel of a display device, comprising: forming a black matrix layer having a first opening on a substrate [42]; forming a color filter layer on the substrate [see 43]; forming an organic layer on the color filter layer and in the first opening [57]; and forming a common electrode on the color filter layer [45]. 580 lacks the step of forming an alignment layer on the the spacer and forming a spacer by back-exposing the organic layer through the first opening. However, 803 teaches forming an alignment layer on the the spacer and forming a spacer by back-exposing the organic layer through the first opening in order to improve spacer position accuracy and manufacturing improvements [see abstract]. Accordingly it would have been obvious to one of ordinary skill at the time of invention to combine 803 with 580.

#### ***Allowable Subject Matter***

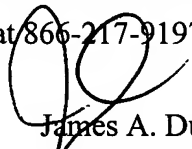
Claims 2-3 and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2871

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James A. Dudek  
Primary Examiner  
Art Unit 2871